

Abstract

Thermostat valve arrangement for the cooling circuit of an internal combustion engine in which a main valve member of a main valve is movably mounted in a housing which may be pressed against a main valve seat by a spring, in which a bypass valve member of a bypass valve is further provided which co-operates with a bypass valve seat in the housing and in which a first section of an expansion element (DWE) co-operates with an abutment fixed to the housing and a second section co-operates with the main valve member and the bypass valve member such that the main valve or bypass valve is selectively closed and/or opened, in order to produce the cooling circuit of the internal combustion engine by means of a radiator or a bypass, the main valve seat being formed by a conical seat surface in the housing, the main valve member forming a valve unit with an axially spaced piston-shaped bypass valve member, which valve unit receives the expansion element in an axial recess in one direction in an axially secure manner, whilst the other end of the expansion element is supported by an abutment of the housing, the valve unit is displaceably and axially guided in a guide component which, in turn, is axially supported in the housing, a valve spring operating between the valve unit and the guide component, which valve spring biases the unit in the direction of the main valve seat and the valve unit and the guide component comprising co-operating stops, by means of which the movement of the parts away from each other is limited and the piston-shaped bypass valve member co-operates with a hollow cylindrical section of the guide component.